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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,183	04/06/2001	Dan A. Steinberg	ACT-121	4378

7590 06/19/2002  
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EXAMINER

DOAN, JENNIFER

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/827,183

Applicant(s)

STEINBERG, DAN A.

Examiner

Jennifer Doan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The drawings filed on 04/06/2001 are accepted.

#### *Specification*

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (U.S. Patent 5,073,003).

Clark discloses, Fig. 1, an optoelectronic package comprising a base chip (18) having V-groove and a surface device (23) which comprises VCSEL (13); a fiber array (15) having an array V-groove (20) formed in a rear and front portion of the array as shown in Fig. 1; the array comprising a monolithic sealing lid (17) (column 4, lines 25-27); wherein the base chip (18) comprising an etching layer (column 2, lines 20-25;

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column 3, lines 23-37; column 4, lines 23-27 and column 4, lines 62-66); wherein the layer including SiO<sub>2</sub> (column 4, lines 24-34) and further wherein the array having a first pit and the chip having a second pit as shown in Fig. 1.

Clark discloses all the limitations in the claimed invention except for a first and second wick stops as recited in claims 1, 10, 14 and 26. However, the first and second wick stops are considered to obvious since it is well-known and commonly used in holding and protecting an optical fiber in the device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Clark's device to have first and second wick stops. Doing so would have an optical fiber securely held and protected in the device.

Clark discloses all the limitations in the claimed invention except for a layer comprising silicon nitrate and Al<sub>2</sub>O<sub>3</sub> as recited in claims 6, 7, 22 and 23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the layer having silicon nitrate and Al<sub>2</sub>O<sub>3</sub>, since it has been held to be within the general skill of a worker in the art to select a known material on the basic of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Clark discloses all the limitations in the claimed invention except for an optical fiber having an angled endface recited in claims 1 and 14. On the other hand, the optical fiber having an angled endface is considered to be an obvious choice in design, since making an angled endface optical fiber is one of many means to reflect the light signals. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Clark's device to have an optical fiber

with an angled endface. Doing so would be desirable to have a greater control over the reflection of the light signals.

Clark discloses all the limitations in the claimed invention except for a surface device comprising a photodetector as recited in claims 13 and 17. However, a photodetector is well known and commonly used in fiber optic communications to detect the light signal. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Clark's device to include the photodetector for the purpose of higher efficiency of detecting the light signals.

Clark discloses all the limitations in the claimed invention except for an alignment sphere disposed between the first and second pits as recited in claims 9 and 25. It would have been an obvious matter of design choice to have the alignment sphere, since such a modification would have involved a mere change in the figure of a component. A change in form or shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuke et al. (DE 3914835) show a device for coupling an optical fiber to an optical transmitting or receiving element. Boudreau et al. (U.S. Patent 5,479,540) show an optoelectronic transceiver module for terminating a bi-directional optical fiber. Uchida (U.S. Patent 5,535,296) show an integrated optoelectronic coupling and connector. Mueller-Fieldler et al. (U.S. Patent 5,577,142) show an optical

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transmitting and receiving device. And Ackley et al. (U.S. Patent 5,627,931) show a fabrication technique for optoelectronic transducers.

6. The prior art documents submitted by applicant in the Information Disclosure Statement filed on June 29, 2001, have all been considered and made of record (note the attached copy of form PTO-1449).

7. Any inquiry concerning the merits of this communication should be directed to Examiner Jennifer Doan whose telephone number is (703) 308-6179. The examiner can normally be reached on Monday to Friday from 6:30 am to 4:00pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Jennifer Doan*

Jennifer Doan

Patent Examiner

June 14, 2002

*Akram E. Ullah*

Akram E. Ullah  
Primary Examiner